### SONY

# Flat Panel Monitor

	0.0
Operating Instructions	GB
Mode d'emploi	FR
Bedienungsanleitung	DE
Manual de instrucciones	ES
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取扱説明書	JP

お買い上げいただきありがとうございます。

⚠警告

電気製品は安全のための注意事項を守らないと、 火災や人身事故になることがあります。

この取扱説明書には、事故を防ぐための重要な注意事項と製品の取り扱いかたを示してあります。**この取扱説明書をよくお読みのうえ**、製品を安全にお使いください。お読みになったあとは、いつでも見られるところに必ず保管してください。

PFM-510A2WU/510A2WE/510A2WJ/510A2WG PFM-500A3WU/500A3WE/500A3WJ/500A3WG

### **WARNING**

#### **Owner's Record**

The model and serial numbers are located on the rear.

Record the model and serial numbers in the spaces provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

rial No

# To prevent fire or shock hazard, do not expose the unit to rain or moisture.

#### For the customers in the U.S.A.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

#### For the customers in Canada

This class A digital apparatus complies with Canadian ICES-003.

#### For the customers in Europe

This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

#### For PFM-510A2WE/510A2WG/500A3WE/ 500A3WG users

## THIS APPARATUS MUST BE EARTHED IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Green-and-yellow: Earth
Blue: Neutral
Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows: The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked with the letter E or by the safety earth symbol  $\frac{1}{7}$  or coloured green or green-and-yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

#### Voor de klanten in Nederland



Bij dit produkt zijn batterijen geleverd. Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.

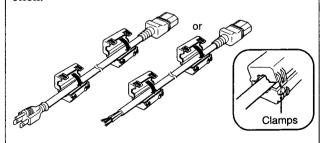
The socket-outlet should be installed near the equipment and be easily accessible.

#### Note

When you connect a computer to this monitor, attach the supplied ferrite cores. If you do not do this, this monitor will not conform to mandatory FCC/IC/CE (EN55022) standards.

#### Attaching the ferrite cores

Set the ferrite cores on the both ends of the AC power cord. Close the lid tightly until the clamps click.



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### **Precautions**

#### On safety

- Operate the unit on 100 to 120 V AC or 220 to 240 V AC.
- A nameplate indicating operating voltage, power . consumption, etc. is located on the rear.
- Should any solid object or liquid fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not to be used for several days or more.
- To disconnect the AC power cord, pull it out by grasping the plug. Never pull the cord itself.
- When the unit is installed on the floor, be sure to use the retractable feet.

#### On installation

- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- When you install multiple equipment with the unit, the following, such as malfunction of the Remote Commander, noisy picture, noisy sound, may occur depending on the position of the unit and other equipment.

#### On the PDP (Plasma Display Panel)

- There may be some tiny black points and/or bright points on the PDP. These points are normal.
- Do not display the same still image on the screen for a long time. Otherwise, an afterimage or ghost may appear on a part of the panel. Use the screen saver function to equalize use of the screen display.

#### On cleaning

To keep the unit looking brand-new, periodically clean it with a mild detergent solution. Never use strong solvents such as thinner or benzine, or abrasive cleansers since these will damage the cabinet. As a safety precaution, unplug the unit before cleaning it.

#### On repacking

Do not throw away the carton and packing materials. They make an ideal container in which to transport the unit. When shipping the unit to another location, repack it as illustrated on the carton.

If you have any questions about this unit, contact your authorized Sony dealer.

#### For PFM-510A2WE/500A3WE Users

The PFM-510A2WE/500A3WE Flat Panel Monitor will not function by itself.

Install the BKM-500 or BKM-501D Input Adaptor in the monitor.

If you are using the BKM-500, refer to this Operating Instructions.

If you are using the BKM-501D, refer to the Operating Instructions supplied with the BKM-501D.

For more details, contact your authorized Sony dealer.

### **Features**

The PFM-510A2W/500A3W series are 16:9 42-inch flat panel monitors adopting a PDP (Plasma Display Panel), which can accept various types of signals with the built-in scan converter.

#### Improved image quality

The PFM-510A2W series achieves higher image quality with its PDP (Plasma Display Panel) set to  $1024 \text{ dots} \times 1024 \text{ lines}$ . This makes for a finely-detailed HDTV and PC image.

The PFM-500A3W series achieves brighter image quality with 852 dots (horizontal) × 480 lines (vertical) adopting PDP technology.

#### Internal high-performance scan converter

The monitor has a high performance scan converter. Using a unique algorithm, the monitor processes signals in a wide range of formats – Video, HDTV, PC, etc.

#### **Flexibility**

An option slot is in place for future expansion. The slot-in option adapter allows for quick and easy system upgrades.

#### Other features

- Three sets of video inputs with audio inputs: one composite video or Y/C input, one RGB input, and one RGB/component input.
- Displays the HDTV signal with a tri-level sync signal.
- Three dimensional comb filter for NTSC Y/C separation.
- Line correlation comb filter for PAL Y/C separation.
- Automatic input signal detection with on-screen indication.
- Windows<sup>1)</sup>95/98 PnP (Plug and Play) compatible.
- Picture AGC function this function automatically adjusts and improves the contrast when a low intensity signal is input.
- On-screen menu for various adjustments and settings
- On-screen display in six languages for user-friendly access. (Languages: English, German, French, Italian, Spanish and Japanese)
- Fine adjustment of image size and position
- Memory function for storage of up to twenty picture settings.
- ID control
- Self-diagnosis function.
- Remote (RS-232C) connector (mini DIN 8-pin)
- Control-S connector
- Accepts infrared or wired Sony Remote Commanders using SIRCS code.
- Vertical setup
- Closed caption decoder
- Screen saver to reduce an afterimage or ghosting.

#### Warning on power connection

Use a proper power cord for your local power supply.

	United States, Canada	Contine Europe	ntal	United Kingdom, Ireland, Australia, New Zealand	Japan 1
Plug type	VM0033B	COX-07	636	a)	VM1296
Female end	VM0113	COX-02	VM0310B	VM0303B	VM1313
Cord type	SJT	H05VV-F	=	CEE (13) 53rd (O.C)	HVCTF
Minimum cord set rating	13A/125V	10A/250	V	10A/250V	10A/125V
Safety approval	UL/CSA	VDE		VDE	DENTORI

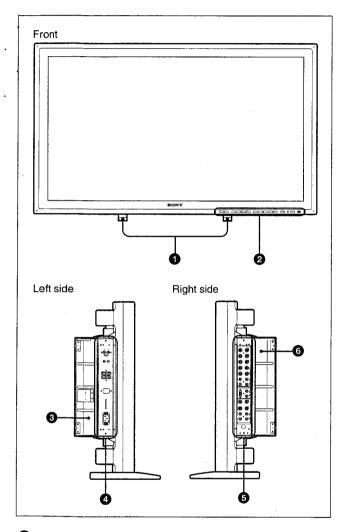
....

a) Note: Use an appropriate rating plug which is applied to local regulations.

<sup>1)</sup> Windows is a registered trademark of the Microsoft Corporation.

# Location and Function of Parts and Controls

#### Front / Sides



#### Retractable feet

Use for setting the monitor on the floor. For details on using the retractable feet, see "Using the Retractable Feet" on page 13 (GB).

#### 2 Control panel

For details on the control panel, see "Control Panel" on page 8(GB).

#### 3 Left panel cover

Open this when using the left connector panel. You can install the Remote Commander in a slot on the back of this cover.

For details on opening the panel cover, see the right-hand side of this page.

#### **4** Left connector panel

For details on the left connector panel, see "Left Connector Panel" on page 10 (GB).

#### **6** Right connector panel

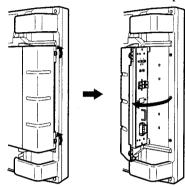
For details on the right connector panel, see "Right Connector Panel" on page 9 (GB).

#### 6 Right panel cover

Open this when using the right connector panel. For details on opening the panel cover, see below.

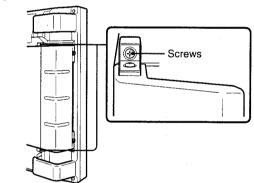
#### To open the panel cover

Loosen the screws counterclockwise and open the cover.



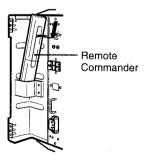
#### To take off the panel cover

Loosen the screws as illustrated below and take off the panel cover.



# To install the Remote Commander in the panel cover

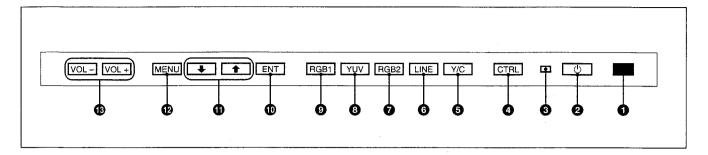
Install the Remote Commander in the slot on the back of the left panel cover as illustrated below.



#### Note

When housing the Remote Commander, make sure that the top of the Remote Commander faces upward and the rear faces outside.

#### **Control Panel**



#### Remote control detector

Receives the beam from the Remote Commander.

#### 2 (standby) switch/() (standby) indicator

Press to turn on the monitor. Press again to go back to the standby mode.

The  $\bigcirc$  (standby) indicator lights up in red in the standby mode.

When the  $\bigcirc$  indicator flashes, see "Self-diagnosis Function" on page 36 (GB).

#### **3** Power indicator

Lights up when the monitor is turned on.

#### **4** CTRL (control) button

To operate the buttons on the control panel, first press this button. When the buttons light up or flash that shows that they can be operated. Press again to deactivate them.

#### Note

The buttons (except for 1 (standby) switch 2) on the control panel do not function if you do not press the CTRL button first.

#### **6** Y/C button

Selects the signal input from the Y/C IN jack among the LINE connectors.

#### 6 LINE button

Selects the signal input from the VIDEO IN connector among the LINE connectors.

#### **7** RGB2 button

Selects the signal input from the RGB2 connectors.

#### **8** YUV button

Selects the component signal input from the RGB1 connectors.

#### 9 RGB1 button

Selects the RGB signal input from the RGB1 connectors.

#### **10** ENT (enter) button

Press to select the desired item from the menu displayed.

#### 

Press to move the cursor (►) to an item or to adjust a value in a menu.

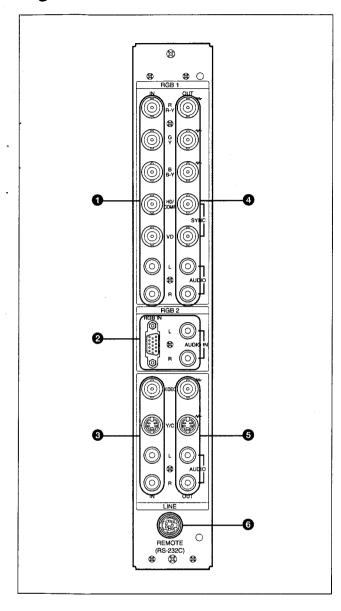
#### **12** MENU button

Press to make the menu appear.

#### **13** VOL (volume) +/- buttons

Press the + button to increase the volume, or the – button to decrease the volume.

#### **Right Connector Panel**



#### Note

The image enhancing process for video signals (NTSC, PAL, SECAM, NTSC4.43, PAL60) works only for composite (Y/C) or component (Y/R-Y/B-Y) input. The image from the RGB input may look blurred. This is normal.

#### **1** RGB1 IN connectors

R (R-Y)/G (Y)/B (B-Y) IN (BNC-type): Inputs an analog RGB signal or a component signal.

Connects to the RGB signal or component (Y/B-Y/R-Y) signal output of a computer or video equipment.

This monitor also accepts an HD analog component (Y/PB/PR) signal. Inputs the PB signal to the B (B-Y) IN connector and PR signal to the R (R-Y) IN connector.

**HD/COMP IN (BNC-type):** Inputs an H sync signal or a composite sync signal. Connects to the H sync signal or composite sync signal output of a computer or video equipment.

VD IN (BNC-type): Inputs the V sync signal. Connects to the V sync signal output of a computer or a piece of video equipment.

An external sync signal is selected automatically. See the priority chart below.

Input connector	Input sync	ignals (i)	
HD/COMP IN	H Sync	Comp Sync	
VD IN	V Sync	_	_
G(Y) IN	Sync on G	Sync on G	Sync on G
Sync signals to be selected	H Sync V Sync	Comp Sync	Sync on G

AUDIO IN (L/R) (phono type): Inputs an audio signal. Connects to the audio output of a computer or a piece of video equipment.

Connects to the channel L when the audio signal is monaural.

#### 2 RGB2 IN connectors

**RGB IN (D-sub 15-pin):** Connects to the RGB signal output of a computer.

AUDIO IN (L/R) (phono type): Inputs an audio signal. Connects to the audio output of a computer. Connects to channel L when the audio signal is monaural.

#### **3** LINE IN connectors

**VIDEO IN (BNC-type):** Connects to the composite video signal output of the video equipment.

Y/C IN (Mini DIN 4-pin): Connects to the Y/C signal output of the video equipment.

**AUDIO IN (L/R) (phono type):** Connects to the audio output of the video equipment. Connects to channel L when the audio signal is monaural.

#### **4** RGB1 OUT connectors

These connectors are used as loop-through outputs of the RGB1 IN connectors ①.

When the plug is connected to the RGB OUT connectors, the 75-ohms termination of the RGB IN connectors is released, and the signal input to the RGB IN connectors is output from the these connectors.

- R (R-Y)/G (Y)/B (B-Y) OUT (BNC-type): Loopthrough outputs of the RGB IN connectors. Connects to the RGB signal or component (Y/B-Y/R-Y) signal input of another monitor.
- HD/COMP OUT (BNC-type): Loop-through output of the HD/COMP IN connector. Connects to the H sync signal or composite sync signal input of another monitor.
- **VD OUT (BNC-type):** Loop-through output of the VD IN connector. Connects to the V sync signal input of another monitor.

#### Note

The HD/COMP OUT and VD OUT connectors are high impedance outputs.

When using these outputs, connect a monitor with a high impedance sync input connector, or the picture might oscillate or disappear because of the sync signal level mismatch.

**AUDIO OUT (L/R) (phono type):** Loop-through outputs of the AUDIO IN jacks. Connects to the audio inputs of another monitor.

#### **5** LINE OUT connectors

These connectors are used as loop-through outputs of the LINE IN connectors 3.

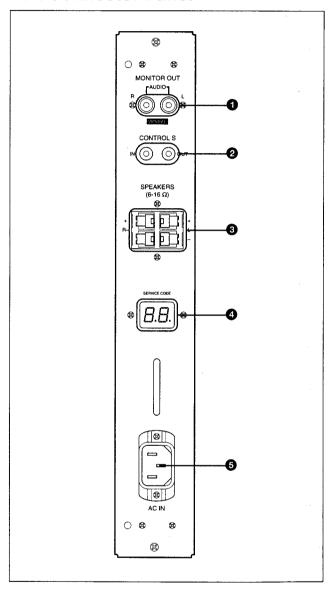
When the plug is connected to the VIDEO OUT connector or Y/C OUT jack, the 75-ohms termination of the VIDEO IN connector or Y/C IN jack is released, and the signal input to the VIDEO IN or Y/C IN jack is output from the VIDEO OUT connector or Y/C OUT jack.

- **VIDEO OUT (BNC-type):** Connects to the composite video signal input of another monitor or video equipment.
- Y/C OUT (Mini DIN 4-pin): Connects to the Y/C signal input of another monitor or a piece of video equipment.
- AUDIO OUT (L/R) (phono type): Loop-through outputs of the AUDIO IN jacks. Connects to the audio inputs of another monitor or a piece of video equipment.

## **6** REMOTE (RS-232C) connector (mini DIN 8-pin)

This connector allows remote control of the monitor using the RS-232C protocol. For details, contact your authorized Sony dealer.

#### **Left Connector Panel**



# **1** MONITOR OUT AUDIO (L/R) jacks (phono type)

Outputs the signal input from the AUDIO IN jacks. Connects to the audio inputs of an audio amplifier (not supplied).

#### Note

These jacks are variable outputs. Set the volume to the maximum position to set the output level to 500 mVrms.

#### **2** CONTROL S IN/OUT jacks (mini jacks)

Connects to the CONTROL S jacks of video equipment or another monitor. Then you can simultaneously control all equipment with a single Remote Commander.

To control equipment by aiming the supplied Remote Commander at the remote control detector of the monitor, connect the CONTROL S OUT jack of the monitor and the CONTROL S IN jack of the other equipment.

#### Notes

- If you connect the CONTROL S IN jack to the other equipment's CONTROL S OUT jack, you cannot operate the monitor with the Remote Commander.
  - You can use a stereo cable with a mini plug instead of the control S cable.

#### 3 SPEAKERS L/R terminals

Connects to speakers with 6 to 16 ohms impedance.

#### Note

Do not connect the speaker's cord to the monitor and to an amplifier simultaneously, or an excessive electric current might flow from the amplifier and damage the monitor.

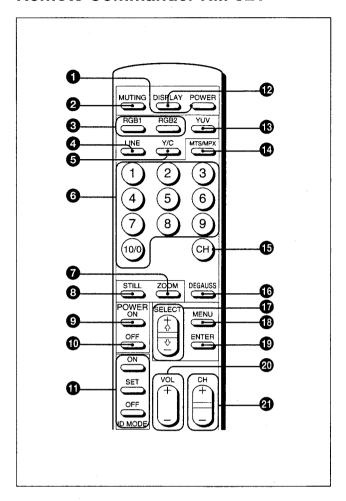
#### **4** SERVICE CODE indicator

The indicator is only for qualified personnel.

#### $\bullet$ $\sim$ AC IN socket

Connect the supplied AC power cord to this socket and to a wall outlet. Once you connect the AC power cord, the (1) (standby) indicator lights up in red and the monitor turns to standby mode.

#### **Remote Commander RM-921**



#### **1** POWER switch

Press to turn on the monitor. Press again to go back to the standby mode.

#### Note

When using multiple monitors, press this switch to turn monitors which are already on to the standby mode, or turn on monitors which are in the standby mode.

#### 2 MUTING button

Press to mute the sound. Press this button again or press the VOL (volume) +/- button to obtain the sound again.

#### 3 RGB1/RGB2 buttons

Select the signal input from the RGB1 or RGB2 connectors.

#### 4 LINE button

Selects the signal input from the VIDEO IN connector in the LINE connectors.

#### **6** Y/C button

Selects the signal input from the Y/C IN jack in the LINE connectors.

#### **6** Number buttons

Press to select the index number.

#### **7** ZOOM button

Each time you press this button, the image size changes (in order) to double ( $\times$ 2), triple ( $\times$ 3), quadruple ( $\times$ 4) and original size.

#### **8** STILL button

This button does not operate with the monitor.

#### **9** POWER ON switch

Press to turn on the monitor. When you use multiple monitors, you can use this switch instead of the POWER switch ① so as not to affect another monitor which may be already turned on.

#### **10** POWER OFF switch

Press to turn the monitor to the standby mode. When you use multiple monitors, you can use this switch instead of the POWER switch 1 so as not to affect another monitor which may be in the standby mode.

#### **1** ID MODE (ON/SET/OFF) buttons

Press the ON button to make an index number appear on the screen. Then press the index number of the monitor you want to operate and press the SET button. After you finish the operation, press the OFF button to return to the normal mode.

#### DISPLAY button

Displays the input signal information and the time at the top of the monitor screen. Press again to clear it.

#### **B** YUV button

Selects the component signal input from the RGB1 connectors.

#### **⚠** MTS/MPX button

This button does not operate with the monitor.

#### **©** CH button

This button does not operate with the monitor.

#### **16** DEGAUSS button

This button does not operate with the monitor.

#### **1** SELECT + **1**/− **↓** buttons

Press to move the cursor (►) to an item or to adjust a value in a menu.

#### MENU button

Press to make the menu appear.

#### **19** ENTER button

Press to select the desired item in a menu.

#### **20** VOL +/- buttons

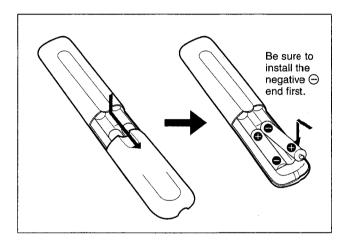
Press the + button to increase the volume, or the – button to decrease the volume.

#### 2 CH +/- buttons

This button does not operate with the monitor.

#### Installing batteries

Insert two size AA (R6) batteries in correct polarity.



- In normal operation, batteries will last up to half a year. If the Remote Commander does not operate properly, the batteries might be exhausted sooner. Replace them with new ones.
- To avoid damage from possible battery leakage, remove the batteries if you do not plan to use the Remote Commander for a fairly long time.

#### When the Remote Commander does not work

Check that the (b) indicator lights up. The Remote Commander operates the monitor only when the monitor is turned on, or it is in the standby mode.

#### Note

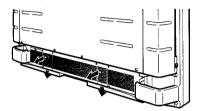
When you use multiple monitors, if you connect the cable to the CONTROL S IN jack on the side of the monitor, you cannot operate the monitor with the Remote Commander.

### Installation

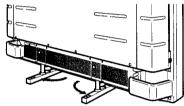
#### **Using the Retractable Feet**

This section describes the installation arrangements for installing the monitor.

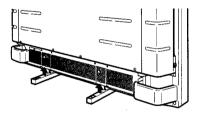
1 Pull out the knobs and pull down the retractable feet.



**2** Turn the retractable feet outward.



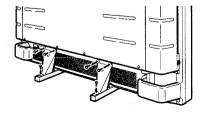
**3** Push in the retractable feet until you hear the click.



#### To fix the retractable feet in place

When the monitor is installed on the floor, be sure to fix the retractable feet in place.

Install the foot support brackets as illustrated below.

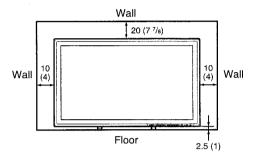


#### Caution

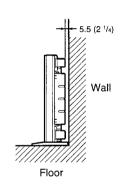
- When you install the monitor, make sure there is more space than that shown in the figure below.
- The ambient temperature must be 0 °C to +35 °C (32 °F to 95 °F).

#### When using the retractable feet

#### **Front**



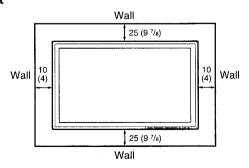
#### Side



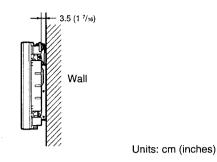
Units: cm (inches)

#### When using the mounting bracket

#### **Front**

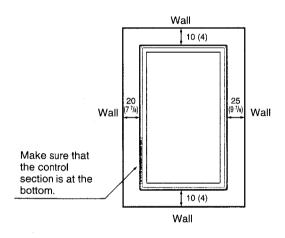


#### Side

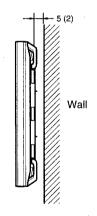


#### Hooked on the wall: Vertically

#### **Front**



#### Side

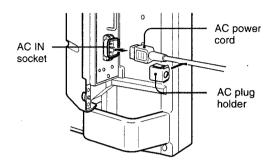


Units: cm (inches)

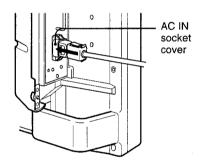
### **Connections**

#### **Connecting the AC Power Cord**

1 Plug the power cord into the AC IN socket. Then, attach the AC plug holder (supplied) to the AC power cord.



2 Slide the AC plug holder over the cord until it connects to the AC IN socket cover.



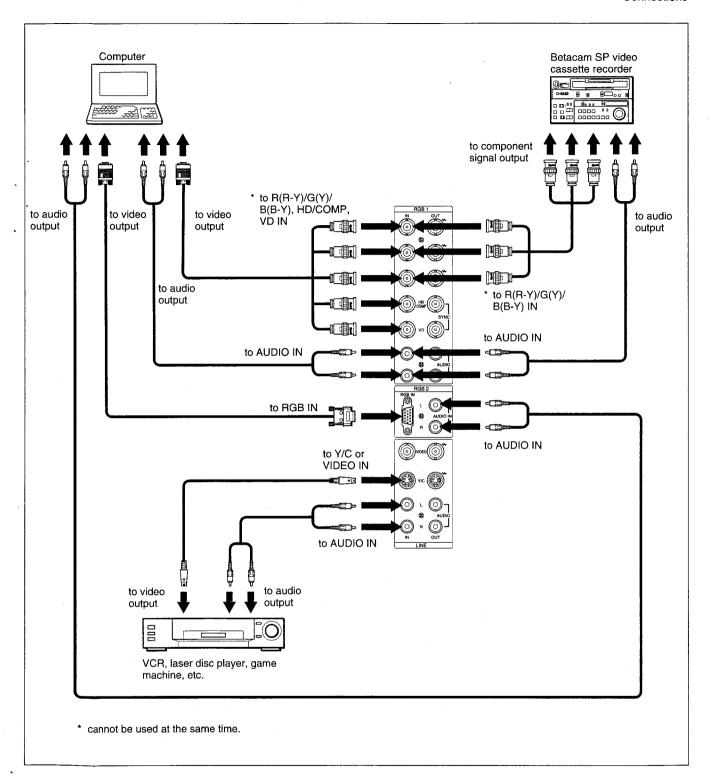
#### To remove the AC power cord

Squeeze the upper and lower sides and pull out the AC plug holder.

### **Connection Example**

#### Before you start

- First make sure that the power to each piece of equipment is turned off.
- Use connecting cables suitable for the equipment to be connected.
- The cable connectors should be fully inserted into the jacks. A loose connection may cause hum and other noise.
- To disconnect the cable, pull it out by grasping the plug. Never pull the cable itself.
- Read the instruction manual of the equipment to be connected.

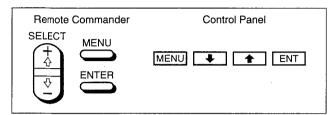


### **Using On-screen Menus**

#### **Operating Through Menus**

#### Menu operating buttons

There are four buttons on the monitor and the Remote Commander for menu operations.



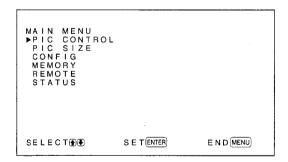
The buttons on the control panel are used for explanation purposes in this operating instructions. The ENTER button on the Remote Commander has the same function as the ENT button on the control panel and the SELECT + ↑/-↓ buttons on the Remote Commander as same as the ↑/↓ buttons on the control panel.

#### Configuration of the menu

To select the language used in the menu, see page 31 (GB).

1 Press MENU.

The main menu appears on the monitor screen.



Press **↑**/**↓** to move the cursor (**▶**) and press ENT to select a menu.

The selected menu appears on the monitor screen.

3 Press **↑**/**↓** to move the cursor (**▶**) and press ENT to select an item.

The menu for the selected item appears on the monitor screen.

4 Press ↑/↓ to adjust or select the setting and press ENT to set.

The setting is registered and the menu returns to the previous menu.

To return to the normal screen, press the MENU button repeatedly until the menu disappears.

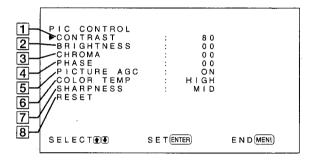
#### Menu Guide

#### Note

"---" appears next to an item when its function is not available. The availability depends on the types of input signal.

#### PIC CONTROL menu

This menu is used for adjusting the picture.



#### 1 CONTRAST

Press ↑ to increase the contrast and press ↓ to decrease it.

#### 2 BRIGHTNESS

Press  $\uparrow$  to make the picture brighter and press  $\downarrow$  to make it darker.

#### 3 CHROMA

Press ↑ to increase color saturation and press ↓ to decrease it.

#### 4 PHASE

Press † to make the overall picture greenish and press to make it purplish.

#### 5 PICTURE AGC

Select ON to automatically increase the brightness when a low brightness signal is input.

This function works only for LINE input or 15 kHz YUV input.

#### 6 COLOR TEMP

Changes color temperature.

For details, see "COLOR TEMP" on page 23 (GB).

#### 7 SHARPNESS

Changes the outline correction level in three levels (HIGH, MID or LOW).

For details, see "SHARPNESS" on page 24 (GB).

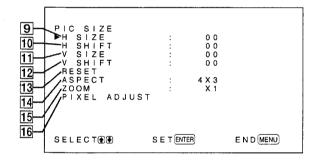
#### 8 RESET

Restores the factory settings in the PIC CONTROL menu items  $\boxed{1}$  to  $\boxed{7}$ .

For details on using the reset function, see "Restoring the PIC CONTROL Menu Items to Original Settings" on page 24 (GB).

#### PIC SIZE menu

This menu is used for resizing and positioning the picture.



#### 9 H SIZE

Adjusts the horizontal picture size. Press  $\uparrow$  to enlarge the horizontal size and press  $\downarrow$  to diminish it.

#### 10 H SHIFT

Adjusts the horizontal centering. Press ↑ to move the picture to the right and press ↓ to move it to the left.

#### 11 V SIZE

Adjusts the vertical picture size. Press  $\uparrow$  to enlarge the vertical size and press  $\downarrow$  to diminish it.

#### 12 V SHIFT

Adjusts the vertical centering. Press ↑ to move the picture up and press ↓ to move it down.

#### 13 RESET

Restores the factory settings in the PIC SIZE menu items 9 to 12.

For details on using the reset function, see "Restoring the Original Picture Size and Position" on page 26 (GB).

#### 14 ASPECT

Sets the aspect ratio of the picture to 4:3, 16:9 or wide-zoom size.

For details on the wide-zoom, see "Enlarging a 4:3 Image to a 16:9 Screen Naturally (Wide Zoom Mode)" on page 27 (GB).

#### **15 ZOOM**

Enlarges the image (in order) to double ( $\times$ 2), triple ( $\times$ 3) and quadruple ( $\times$ 4). You can also operate with the ZOOM button on the Remote Commander.

#### Note

When you use the wide zoom mode, set ZOOM to  $\times 1$ . If ZOOM is set to  $\times 2$ ,  $\times 3$  or  $\times 4$ , the wide zoom mode cannot be used.

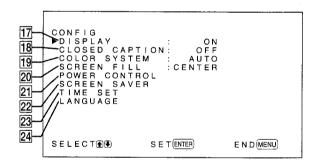
#### 16 PIXEL ADJUST

Adjusts the dot phase and total number of horizontal pixels when you see noise on the edges of the characters and the vertical lines.

For details, see "Adjusting the Pixels" on page 28 (GB).

#### **CONFIG** menu

This menu is used for adjusting the signal or selecting the language.



#### 17 DISPLAY

Selects ON to display the input signal information for about five seconds at the top of the monitor screen when turning on the power or switching the input signal.

#### 18 CLOSED CAPTION

Displays closed captions.

For details, see "Displaying Closed Captions" on page 20 (GB).

#### 19 COLOR SYSTEM

Selects the input signal.

AUTO: to display NTSC, PAL or SECAM signals

**443NT:** to display NTSC4.43 signals **PAL60:** to display PAL60 signals

#### **20** SCREEN FILL

Selects the point of origin for resizing the picture.

**CENTER:** Sets the point of origin on the center of the monitor

**CORNER:** Sets the point of origin at the upper-left corner of the monitor.

#### 21 POWER CONTROL

Sets the length of time until the system goes into the power saving mode.

For details, see "Controlling Power On/Off Automatically (Power Control Function)" on page 34 (GB).

#### 22 SCREEN SAVER

Enables the screen saver to reduce afterimage or ghosting.

For details, see "Reducing Afterimage/Ghosting (Screen Saver Function)" on page 31 (GB).

#### 23 TIME SET

Sets the time.

For details, see "Adjusting the time" on page 21 (GB).

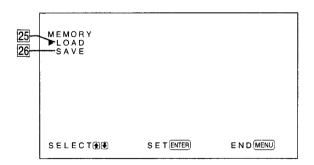
#### 24 LANGUAGE

Selects the on-screen language (English, German, French, Italian, Spanish or Japanese).

For details, see "Selecting the On-screen Language" on page 31 (GB).

#### **MEMORY** menu

This menu is used for saving or recalling the settings in the PIC CONTROL and PIC SIZE menus.



For details, see "Using the Memory Function" on page 29 (GB).

#### 25 LOAD

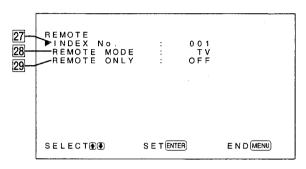
Recalls the preset settings.

#### 26 SAVE

Saves the settings.

#### **REMOTE** menu

This menu is used for remote control settings.



#### 27 INDEX No.

Sets the index number of the monitor.

#### Note

When you set the number, use the buttons on the monitor.

For details about the index number, see "Operating a Specific Monitor With the Remote Commander" on page 36 (GB).

#### 28 REMOTE MODE

Selects the Remote Commander mode.

TV: The Sony monitors' or the TVs' commander

PJ: The Sony projectors' commander

**OFF:** Disables the remote control.

#### Note

When you change the Remote Commander mode, use the buttons on the monitor. You cannot change the Remote Commander mode with the Remote Commander.

For details, see "Using Other Remote Commander Models" on page 38 (GB).

#### 29 REMOTE ONLY

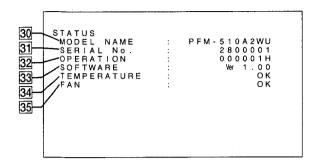
Select ON to disable the front control buttons on the monitor. The monitor can only be controlled with the Remote Commander. While REMOTE ONLY is ON, the indicators on the front panel go off.

To cancel the REMOTE ONLY mode, set REMOTE ONLY to OFF with the Remote Commander, or press the CTRL button while pressing the (b) switch on the monitor. The monitor turns to the standby mode and the REMOTE ONLY mode is cancelled.

The setting in this item is still retained when the AC power cord is disconnected or when you turn on off the monitor with the Remote Commander.

#### STATUS menu

This menu is used for displaying the internal condition of the monitor.



#### **30 MODEL NAME**

Indicates the model name.

#### 31 SERIAL No.

Indicates the serial number.

#### **32 OPERATION**

Indicates the total operation hours.

#### Note

The standby mode is not counted as part of the OPERATION time.

#### 33 SOFTWARE

Indicates the system software version.

#### 34 TEMPERATURE

Indicates whether the internal temperature of the monitor is normal.

OK: Normal NG: Unusual

When the internal temperature is unusual, NG is displayed and the item flashes in red. The 1 indicator on the control panel also flashes.

#### Note

The "TEMPERATURE NG" message may appear when the ventilation holes are blocked or the monitor is installed in a poorly ventilated area. In this case, check that the ventilation holes are not blocked and install the monitor in a well ventilated area. If the message is still displayed, contact your authorized Sony dealer.

When the (1) indicator flashes or NG is indicated, see "Self-diagnosis Function" on page 36 (GB).

#### **35** FAN

The cooling fans are built into this monitor. This item indicates whether the cooling fans work properly.

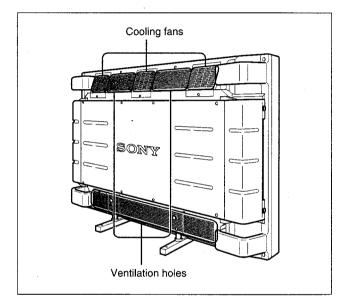
OK: Normal NG: Unusual

When the cooling fans are not working normally, NG is displayed and the item flashes in red. The (b) indicator on the control panel also flashes.

#### Note

When the "FAN NG" message appears, contact your authorized Sony dealer.

When the (b) indicator flashes or NG is indicated, see "Self-diagnosis Function" on page 36 (GB).



#### Note

The upper cooling fans detect the monitor's internal temperature and control the fan rotation. If the ambient temperature is high, the fan speed increases and the noise will be louder.

### Watching the Picture

#### Before you start

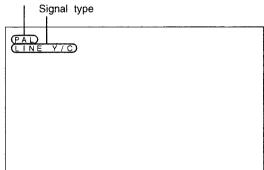
- Turn on the monitor.
- Turn on the connected equipment and play a video source.
- To display the input signal information on the screen when turning on the power or switching the input signal, set "DISPLAY" in the CONFIG menu to ON.
- To select the on-screen language used in the menu, see page 31 (GB).

#### **Switching the Input Signal**

- 1 Press CTRL on the control panel of the monitor. The RGB1, YUV, RGB2, LINE, and Y/C buttons light up.
- **2** Select the input source to be displayed by pressing the following buttons.
  - **RGB1:** Selects the audio and video signal input from the RGB1 connectors when the input signal is an RGB signal.
  - YUV: Selects the audio and video signal input from the RGB1 connectors when the input signal is a component signal.
  - **RGB2:** Selects the audio and video signal input from the RGB2 connectors.
  - LINE: Selects the audio and video signal input from the VIDEO IN connector and AUDIO IN jack among the LINE connectors.
  - Y/C: Selects the audio and video signal input from the Y/C IN connector and AUDIO IN jack among the LINE connectors.

Color system or horizontal/vertical frequency

L. Signal, type



The selected input signal appears on the monitor screen.

You can also switch the input signal with the Remote Commander.

#### Note

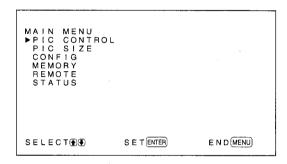
We recommend input source video equipment equipped with a TBC (time base corrector). If the monitor receive a signal without TBC, the picture may disappear due to disturbance of the sync signal.

#### **Switching the Display Mode**

#### **Displaying Closed Captions**

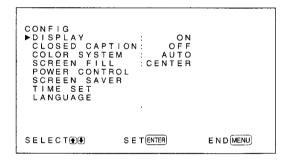
Press MENU.

The main menu appears on the monitor screen.



2 Press **↑**/**↓** to move the cursor (**▶**) to "CONFIG" and press ENT.

The CONFIG menu appears on the monitor screen.



3 Press ★/♣ to move the cursor (►) to "CLOSED CAPTION" and press ENT.
The following menu appears on the monitor screen.

CLOSED	CAPTION:	OFF	

**4** Select the caption type.

**OFF:** The caption is not displayed.

CAPT1: Displays caption1 over the picture.

**CAPT2:** Displays caption2 over the picture.

**TEXT1:** Displays caption 1 against a black background.

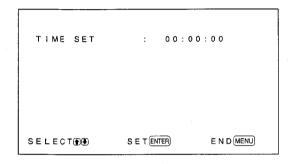
**TEXT2:** Displays caption2 against a black background.

**5** Press MENU.

· The menu returns to the CONFIG menu.

#### Adjusting the time

In the CONFIG menu, press ↑/↓ to move the cursor (▶) to "TIME SET" and press ENT. The following menu appears on the monitor screen.



- **2** Press ENT.

  The background of the hour is displayed in cyan.
- 3 Adjust the hour with ↑/↓ and press ENT. The hour is defined and the background of the minute is displayed in cyan.
- 4 Similarly, adjust the minute and press ENT.

  The minute is defined and the second is reset to 00.

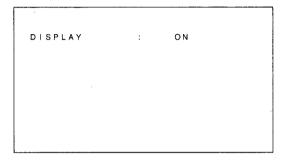
To display the time, press the DISPLAY button on the Remote Commander. The time is displayed in the upper-right corner of the monitor.

# **Input Signal and Monitor Status Information Display**

Input signal and monitor status information is displayed on the monitor screen for about five seconds when turning on the power or switching the input signal.

To disable this function, follow the steps below.

1 In the CONFIG menu, press ↑/↓ to move the cursor (►) to "DISPLAY" and press ENT. The following menu appears on the monitor screen.



2 Press **↑**/**↓** to set DISPLAY to OFF and press ENT.

The DISPLAY function is disabled.

To activate the information function, set DISPLAY to ON in step **2** above. The factory default is ON.

#### Note

You can display the input signal information and the time anytime by pressing the DISPLAY button on the Remote Commander, regardless of the above setting.

#### The input signal information list

Signal type

Time

31.5kHz/60Hz

(16:30:40)

7.5	Preset inpu	t signals	46.48.47
	Signal name	Color system	or horizontal/
	Computer signals	vertical i	requency
1	VGA <sup>a)</sup> -1 (VGA 350)	31.5kHz	70Hz
2	640×350@85Hz (VESA <sup>b)</sup> STD)	37.9kHz	85Hz
3	640×400@85Hz (VESA STD)	37.9kHz	85Hz
4	640×480@60Hz (VESA STD)	31.5kHz	60Hz
5	Mac <sup>c)</sup> 13"	35.0kHz	67Hz
6	640×480@72Hz (VESA STD)	37.9kHz	73Hz
7	640×480@75Hz (VESA STD)	37.5kHz	75Hz
8	640×480@85Hz (VESA STD)	43.3kHz	85Hz
9	VGA (VGA TEXT)	31.5kHz	70Hz
10	720×400@85Hz (VESA STD)	37.9kHz	85Hz
11	800×600@56Hz (VESA STD)	35.2kHz	56Hz
12	800×600@60Hz (VESA STD)	37.9kHz	60Hz
13	800×600@72Hz (VESA STD)	48.1kHz	72Hz
14	, , , , , , , , , , , , , , , , , , , ,	46.1KHz	75Hz
15	800x600@75Hz (VESA STD)	53.7kHz	85Hz
	800×600@85Hz (VESA STD)		
<u> </u>	16 Mac 16" 49.7kHz 75H		
$\vdash$	7 1024×768@60Hz (VESA STD) 48.4kHz 60Hz		
<u> </u>	3 1024×768@70Hz (VESA STD) 56.5kHz 70Hz		
<b>—</b>	0 1024×768@75Hz (VESA STD) 60.0kHz 75Hz		
-	1024×768@85Hz (VESA STD) 68.7kHz 85Hz		
$\vdash$			
22			
	3 1280×960@60Hz (VESA STD) 60.0kHz 60Hz		
	24 1280×960 @ 85Hz (VESA STD)		
	25   1280×1024@60Hz (VESA STD)   64.0kHz   60Hz		
	1280×1024@75Hz (VESA STD)	80.0kHz	75Hz
$\vdash$	1280×1024@85Hz (VESA STD)	91.1kHz	85Hz
28	1600×1200@60Hz (VESA STD)	75.0kHz	60Hz
L.	SDTV/HDTV		
_1	PAL	P/	
2	NTSC	NT	
3	SECAM	SEC	
4	NTSC4.43	04.43 NTSC/4.43	
5	PAL60	PAI	
6	1080/24psf	27.0kHz	48Hz
7	1080/50i	28.1kHz	50Hz
8	575/50p	31.3kHz	50Hz
9	480/60p	31.5kHz	60Hz
10	1080/60i	33.8kHz	60Hz
11	720/60p	45.0kHz	60Hz

- a) VGA is a registered trademark of International Business Machines Corporation, USA.
- b) VESA is a registered trademark of the Video Electronics Standards Association.
- c) Mac (Macintosh) is a registered trademark of Apple Computer, Inc.

#### Notes

- When inputting an HDTV signal, input the tri-level sync signal to the G (Y) IN connector.
- When inputting the computer signal shown in item No. 28, set the H SIZE, H SHIFT, V SIZE and V SHIFT to the standard (00) and set ZOOM to ×1 in the PIC SIZE menu, or the picture might oscillate.

#### Actual on-screen display of the monitor status

On-screen display	Significance
31.5kHz / 60Hz (eg.)	The selected input signal is computer RGB.
525 / 60 (eg.)	The selected input signal is RGB or component video.
NTSC (eg.)	The selected input signal is NTSC.
OTHERS	The input signal is out of the capture range.
NO SYNC	There is no input signal.
MUTING	The sound is muted.
RGB1 RGB	The signal mode of RGB1 is set to RGB.
RGB1 YUV	The signal mode of RGB1 is set to component video.
LINE COMPOSITE	Composite video input is selected at LINE.
LINE Y/C	Y/C video input is selected at LINE.

### **Adjusting the Picture**

While watching the picture, you can adjust contrast, brightness, chroma, phase, and so on, to suit your taste. The adjustments can be carried out for each input signal separately. You can also store the adjusted levels in memory.

# Adjusting the Contrast, Brightness, Chroma, and Phase, etc.

Press MENU so that the main menu appears on the monitor screen and select "CONTRAST", "BRIGHTNESS", "CHROMA", "PHASE", "PICTURE AGC", "COLOR TEMP" or "SHARPNESS" from the PIC CONTROL menu with \\rightarrow\rig

#### CONTRAST

Select "CONTRAST" with  $\uparrow/\downarrow$  and press ENT. Adjust the contrast with  $\uparrow/\downarrow$  in the range from MIN (0) to MAX (+100).

**†:** to increase picture contrast

➡: to decrease picture contrast

#### **BRIGHTNESS**

Select "BRIGHTNESS" with  $\uparrow/\downarrow$  and press ENT. Adjust the brightness with  $\uparrow/\downarrow$  in the range from MIN (-50) to MAX (+50).

**†:** to make the picture brighter

**♦:** to make the picture darker

#### **CHROMA**

Select "CHROMA" with  $\uparrow/\downarrow$  and press ENT. Adjust the chroma with  $\uparrow/\downarrow$  in the range from MIN (-50) to MAX (+50).

**†:** to increase color intensity

**\\$**: to decrease color intensity

#### PHASE

Select "PHASE" with  $\uparrow/\downarrow$  and press ENT. Adjust the phase with  $\uparrow/\downarrow$  in the range from MIN (–50) to MAX (+50).

**†:** to make overall picture greenish

**↓**: to make overall picture purplish

# Automatic Brightness Control – Enhancing the Image Contrast

If the average brightness of the image is low, the system can automatically raise the contrast level to enhance the brightness. This function works well for displaying dark images.

Select "PICTURE AGC" with  $\uparrow/\downarrow$  and press ENT. Set PICTURE AGC to ON or OFF with  $\uparrow/\downarrow$ .

#### **COLOR TEMP (Color Temperature)**

Set the color temperature. You can select HIGH or LOW, or adjust each gain more precisely. Up to six adjusted color temperatures can be registered. You can rename them (up to six characters in length).

- 1 Select "COLOR TEMP" with ↑/↓ and press ENT.
- 2 Select the color temperature with **↑**/**↓** and press ENT

**HIGH:** to set the color temperature to high **LOW:** to set the color temperature to low 1-6: to set the gain more precisely

When you select HIGH or LOW, the menu returns to the PIC CONTROL menu.

#### When you select "1" to "6"

When you select "1" to "6", the following menu appears on the monitor screen.

```
COLOR TEMP : 1

RED GAIN : 255
GREEN GAIN : 255
BLUE GAIN : 255
NAME SET

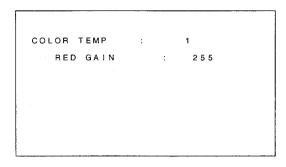
SELECT®® ADJUSTENTER ENDMENU
```

(1) Select a number to register with **↑**/**↓** and press ENT.

The cursor (▶) appears on the monitor screen.

(2) Press **↑**/**↓** to move the cursor (**▶**) to the gain that you want to set.

The following menu appears on the monitor screen.



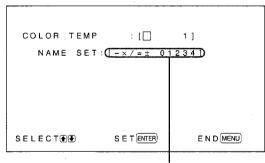
- (3) Adjust the gain (10 to 255) with **↑**/**↓** and press MENU.
  - The menu returns to the COLOR TEMP menu.
- (4) Repeat steps (2) and (3) to set the other gains and press MENU.

The menu returns to the COLOR TEMP menu.

When you rename the adjusted color temperature, follow the steps below.

(5) Press **↑**/**↓** to move the cursor (**▶**) to "NAME SET" and press ENT.

The following menu appears on the monitor screen.



Character list

- (6) Select the character to be changed with **↑**/**↓** and press ENT.
  - The background of one character in the character list changes to cyan.

(7) Select a character in the character list with 
↑/↓ and press ENT.

The selected character is input.

(8) Repeat steps (6) and (7) until you finish inputting the name, then press MENU. The menu returns to the COLOR TEMP menu.

#### **SHARPNESS**

Change the outline correction level in three levels (HIGH, MID or LOW).

- 1 Press **↑**/**↓** to move the cursor (**▶**) to "SHARPNESS" and press ENT.
- 2 Select the outline correction level with ↑/↓ and press ENT.

HIGH: sharper picture MID: standard value LOW: softer picture

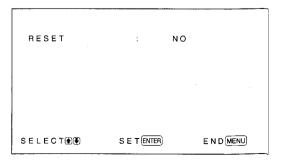
#### Notes

- CHROMA and PHASE controls do not function with an RGB signal.
- PHASE control does not function with a component signal.
- PHASE control does not function with a PAL or SECAM color source.
- Do not change the CHROMA/PHASE (NTSC only) level when the selected signal is black-and-white. Although it has no effect on the current picture, it does affect the picture of color signals such as NTSC or PAL which may be input later.

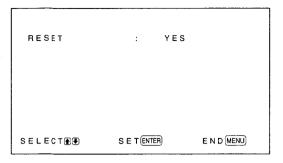
# Restoring the PIC CONTROL Menu Items to Original Settings

1 In the PIC CONTROL menu, Press ↑/↓ to n ove the cursor (▶) to "RESET" and press ENT.

The following menu appears on the monitor screen.



2 Press **↑**/**↓**. "NO" changes to "YES".



**3** Press ENT.
The PIC CONTROL menu items are restored.

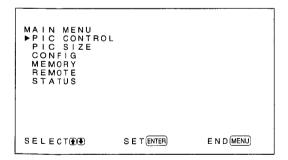
To cancel the reset function, press MENU before pressing ENT.

# **Resizing and Positioning the Picture**

You can shift the position of the picture so that it fits the screen, or adjust the vertical and horizontal size of the picture separately. You can adjust the setting to display the 4:3 image at the more natural 16:9 setting.

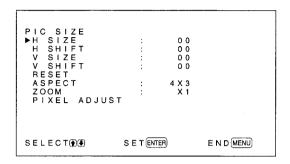
### **Resizing the Picture**

Press MENU.
The main menu appears on the monitor screen.



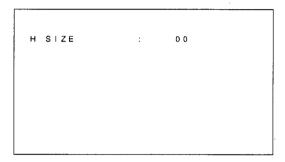
2 Press **↑**/**↓** to move the cursor (**▶**) to "PIC SIZE" and press ENT.

The PIC SIZE menu appears on the monitor screen.



**3** Press **↑**/**↓** to move the cursor (**▶**) to "H SIZE" and press ENT.

The following menu appears on the monitor screen.



4 Press **↑**/**↓** to resize the picture.

**†:** to expand horizontal size

**↓:** to reduce horizontal size

The horizontal picture size is indicated on the monitor screen in the range from MIN (-50) to MAX (+50). The factory preset value is 00.

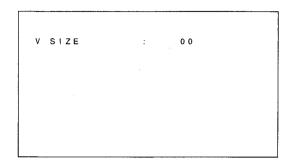
#### Note

The lower limit of the setting may be above the MIN depending on the input signal type.

**5** Press ENT.
The menu returns to the PIC SIZE menu.

6 Press **↑**/**↓** to move the cursor (**▶**) to "V SIZE" and press ENT.

The following menu appears on the monitor screen.



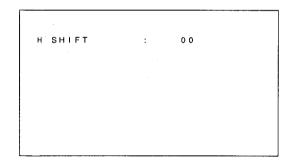
- **7** Press **↑**/**↓** to resize the picture.
  - 1: to expand vertical size
  - **↓**: to reduce vertical size

The vertical picture size is indicated on the monitor screen from MIN (-50) to MAX (+50). The factory preset value is 00.

**8** Press ENT.
The menu returns to the PIC SIZE menu.

#### **Adjusting the Picture Position**

In the PIC SIZE menu, press ↑/↓ to move the cursor (▶) to "H SHIFT" and press ENT. The following menu appears on the monitor screen.



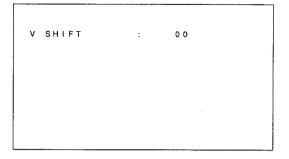
- 2 Press **↑**/**↓** to shift the picture.
  - 1: to shift the picture to the right
  - **\\$:** to shift the picture to the left

The horizontal picture position is indicated on the monitor screen from MIN (-50) to MAX (+50). The factory preset value is 00.

**3** Press ENT.
The menu returns to the PIC SIZE menu.

4 Press **↑**/**↓** to move the cursor (**▶**) to "V SHIFT" and press ENT.

The following menu appears on the monitor screen.



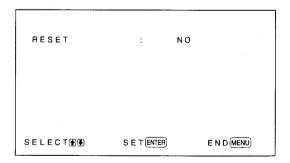
- **5** Press **↑**/**↓** to shift the picture.
  - **†:** to shift the picture upward
  - **↓:** to shift the picture downward

The vertical picture position is indicated on the monitor screen from MIN (-50) to MAX (+50). The factory preset value is 00.

6 Press ENT.
The menu returns to the PIC SIZE menu.

# Restoring the Original Picture Size and Position

1 In the PIC SIZE menu, press ↑/↓ to move the cursor (▶) to "RESET" and press ENT. The following menu appears on the monitor screen.



2 Press **↑**/**↓**. "NO" changes to "YES".

RESET	: YES	
SELECT∰€	S E T (ENTER)	E N D MENU

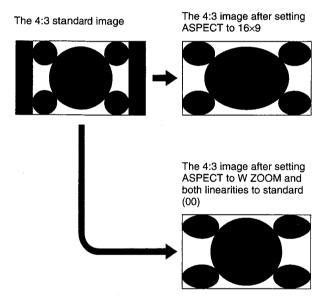
**3** Press ENT.

The original picture size and position are restored.

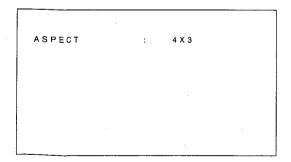
To cancel the reset function, press MENU before pressing ENT.

# Enlarging a 4:3 Image to a 16:9 Screen Naturally (Wide Zoom Mode)

When you ordinarily watch a 4:3 standard image in the 16:9 screen, the image is seen distorted in a horizontal direction due to the difference in proportion. If you use wide zoom mode, the center of the monitor will not be distorted as much and the corners of the monitor will be distorted instead. You can change the linearities by adjusting the H LINEARITY and V LINEARITY settings.

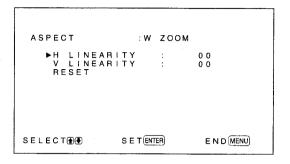


In the PIC SIZE menu, press ↑/↓ to move the cursor (▶) to "ASPECT" and press ENT. The following menu appears on the monitor screen.



Press **↑**/**↓** to move the cursor (**▶**) to "W ZOOM" and press ENT.

The following menu appears on the monitor screen.

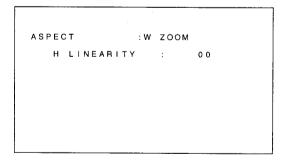


- **3** If you do not change H LINEARITY or V LINEARITY, press ENT.
  The menu returns to the PIC SIZE menu.
  When you change H LINEARITY or V LINEARITY, follow the steps below.
- 4 Press ♠/♣ to move the cursor (▶) to "H LINEARITY" or "V LINEARITY" and press ENT.

**H LINEARITY:** to change the linearity in the horizontal direction

**V LINEARITY:** to change the linearity in the vertical direction

The following menu appears on the monitor screen. (The illustration below is for selecting the H LINEARITY.)



**5** Adjust the screen size with  $\uparrow/\downarrow$ .

## To restore wide zoom mode items to their original settings

In the ASPECT menu, select W ZOOM and press ENT. Press ♠/♣ to move the cursor (▶) to "RESET" and press ENT. Then select YES with ♠/♣ and press ENT.

#### Note

If you use the wide zoom mode, it is recommended that you set the H SIZE, H SHIFT, V SIZE and V SHIFT to the standard (00). If you change them too much, the wide zoom display may be distorted. Before you use the wide zoom mode, set ZOOM to  $\times 1$ . If ZOOM is set to  $\times 2$ ,  $\times 3$  or  $\times 4$ , the wide zoom mode cannot be used.

### **Adjusting the Pixels**

If there is too much noise on the edges of the characters or the vertical lines, you can adjust the dot phase and total number of horizontal pixels.

**1** Press MENU.

The main menu appears on the monitor screen.

```
MAIN MENU

▶PIC CONTROL

PIC SIZE

CONFIG

MEMORY

REMOTE

STATUS

SELECT⊕⊕ SETENTER ENDMENU
```

2 Press **↑**/**↓** to move the cursor (**▶**) to "PIC SIZE" and press ENT.

The PIC SIZE menu appears on the monitor screen.

```
PIC SIZE

►H SIZE : 00

H SHIFT : 00

V SIZE : 00

V SHIFT : 00

RESET

ASPECT : 4X3

ZOOM : X1

PIXEL ADJUST

SELECT®® SETENTER ENDMENU
```

**3** Press **↑**/**↓** to move the cursor (**▶**) to "PIXEL ADJUST" and press ENT.

The following menu appears on the monitor screen.

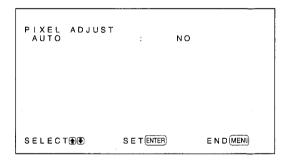
```
PIXEL ADJUST
►AUTO
DOT PHASE : 50
TOTAL H PIXEL : 800
RESET

SELECT®® SETENTER ENDMENU
```

4 You can adjust the dot phase and total number of horizontal pixels automatically or manually.

Adjusting automatically

(1) Select AUTO with **↑**/**↓** and press ENT. The following menu appears on the monitor screen.



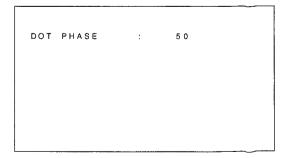
(2) Select YES with ↑/♣ and press ENT.

The dot phase and total number of horizontal pixels are adjusted automatically.

#### **Adjusting manually**

(1) Select DOT PHASE or TOTAL H PIXEL with ↑/↓ and press ENT.

The following menu appears on the monitor screen. (The illustration below is for selecting the DOT PHASE.)



(2) Adjust the dot phase or total number of horizontal pixels with ↑/↓ and press ENT.

## To restore PIXEL ADJUST menu items to their original settings

In the PIXEL ADJUST menu, press ♠/♣ to move the cursor (▶) to "RESET" and press ENT. Then select YES with ♠/♣ and press ENT.

# Using the Memory Function

You can save the current picture setting for each input signal using the MEMORY function. The saved settings can be restored whenever necessary. The items in the PIC CONTROL and PIC SIZE menus can be memorized. You can save the picture settings of up to twenty input signals. You can name the settings of the items (up to 10 characters in length).

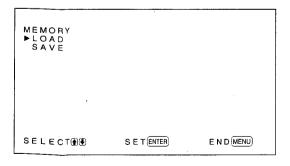
#### **Storing the Current Setting**

Press MENU.
The main menu appears on the monitor screen.

```
MAIN MENU
►PIC CONTROL
PIC SIZE
CONFIG
MEMORY
REMOTE
STATUS

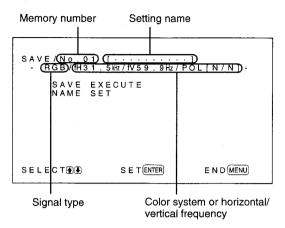
SELECT®® SETENTER ENDMENU
```

Press ↑/↓ to move the cursor (►) to "MEMORY" and press ENT.
The MEMORY menu appears on the monitor screen.



3 Press **↑**/**↓** to move the cursor (**▶**) to "SAVE" and press ENT.

The following menu appears on the monitor screen.



If there is no data in the selected memory number, the "-- EMPTY --" message appears on the monitor screen in cyan. The signal type and the color system or horizontal/vertical frequency are displayed in cyan (showing that the signal type of the selected memory number is the same as that of the current setting) or in yellow (showing that the signal type of the selected memory number is not the same as that of the current setting).

- 4 Select a memory number (01 to 20) with ↑/↓ and press ENT.

  The cursor (▶) appears on the monitor screen.
- Press ↑/↓ to move the cursor (▶) to "SAVE EXECUTE" and press ENT.

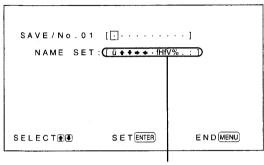
  The current data is stored under the selected memory number. The "SAVE COMPLETED" message appears for about five seconds.

  When you name the setting, follow the steps below.

6 Press ↑/↓ to move the cursor (▶) to "NAME SET" and press ENT.

The following menu appears on the monitor

The following menu appears on the monitor screen.



Character list

- 7 Select the character to be changed with ↑/♣ and press ENT.
  The background of a character in the character list changes to cyan.
- 8 Select a character in the character list with ↑/↓ and press ENT.

  The selected character is input.
- **9** Repeat steps **7** and **8** until you finish inputting the name, then press MENU.

  The menu returns to the SAVE menu.

#### Note

If the storing of the setting fails, the "SAVE ERROR" message appears on the monitor screen. Try to store the setting again.

### **Calling Up a Stored Setting**

In the MEMORY menu, press ↑/↓ to move the cursor (▶) to "LOAD" and press ENT.
The first page of the stored settings appears on the monitor screen.

```
LOAD / No. 01 [.......]
- RGB / H31 .5 \( \text{id} \) / (V59 .9 \( \text{Hz} \) / POL [N / N] -
CONTRAST : 80
BRIGHTNESS : 00
COLOR TEMP : HIGH
H SIZE : 00
H SHIFT : 00
V SIZE : 00
V SIZE : 00
V SHIFT : 00
ASPECT : 4X3
ZOOM : X1

SELECT⊕⊕ VERIFY ENTER END MENU
```

2 Select a memory number (01 to 20) with **↑**/**↓** and press ENT.

The second page of the stored settings appears on the monitor screen.

The signal type and the color system or horizontal/vertical frequency are displayed in cyan (showing that the signal type of the selected memory number is the same as that of the current setting and you can call up the stored setting) or in red (showing that the signal type of the selected memory number is not the same as that of the current setting and you cannot call up the stored setting).

**3** Press ENT.

The "LOAD COMPLETED" message appears for about five seconds and the picture is adjusted to the selected setting.

#### Note

If the loading fails, the "LOAD ERROR" message appears on the monitor screen. Try to load the setting again.

# Selecting the On-screen Language

You can select the on-screen language from among English, German, French, Italian, Spanish or Japanese.

- 1 Press MENU.
  - The main menu appears on the monitor screen.

```
MAIN MENU
▶PIC CONTROL
PIC SIZE
CONFIG
MEMORY
REMOTE
STATUS

SELECT®® SETENTER ENDMENU
```

2 Press **↑**/**↓** to move the cursor (**▶**) to "CONFIG" and press ENT.

The CONFIG menu appears on the monitor screen.

```
CONFIG

DISPLAY

CLOSED CAPTION: OFF
COLOR SYSTEM : AUTO
SCREEN FILL :CENTER
POWER CONTROL
SCREEN SAVER
TIME SET
LANGUAGE

SELECT⊕⊕ SETENTER ENDMENU
```

Press ♠/♣ to move the cursor (▶) to "LANGUAGE" and press ENT.

The following menu appears on the monitor screen.

```
LANGUAGE
►ENGLISH
DEUTSCH
FRANÇAIS
ITALIANO
ESPAÑOL
H本語

SELECT®® SETENTER ENDMENU
```

4 Press **↑**/**↓** to move the cursor (**▶**) to the desired language and press ENT.

The on-screen language is switched to the one you selected.

ENGLISH: English DEUTSCH: German FRANÇAIS: French ITALIANO: Italian ESPAÑOL: Spanish 日本語: Japanese

**5** Press MENU.

The menu returns to the CONFIG menu.

### Reducing Afterimage/ Ghosting (Screen Saver Function)

If a bright image that does not change is displayed on a screen (e.g., PC) for a long time, an afterimage (ghosting) may occur. To reduce this afterimage, this monitor has a screen saver function. The screen saver function has two screen savers. One screen saver reverses the image (PIC INVERSION) while the other automatically changes the display position (PIC ORBITING).

### Reversing the Image

1 Press MENU.

The main menu appears on the monitor screen.

```
MAIN MENU

▶PIC CONTROL

PIC SIZE

CONFIG

MEMORY

REMOTE

STATUS

SELECT®® SETENTER ENDMENU
```

2 Press **↑**/**↓** to move the cursor (**▶**) to "CONFIG" and press ENT.

The CONFIG menu appears on the monitor screen.

CONFIG

DISPLAY : ON
CLOSED CAPTION: OFF
COLOR SYSTEM : AUTO
SCREEN FILL : CENTER
POWER CONTROL
SCREEN SAVER
TIME SET
LANGUAGE

SELECTRO SETEMER ENDMENU

3 Press **↑**/**↓** to move the cursor (**▶**) to "SCREEN SAVER" and press ENT.

The following menu appears on the monitor.

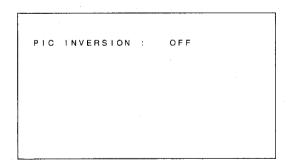
The following menu appears on the monitor screen.

SCREEN SAVER
▶PIC INVERSION : OFF
PIC ORBITING

SELECT⊕⊕ SETENTER ENDMENU

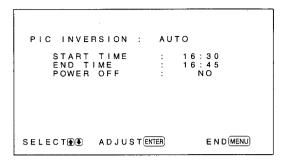
4 Press ↑/↓ to move the cursor (▶) to "PIC INVERSION" and press ENT.

The following menu appears on the monitor screen.



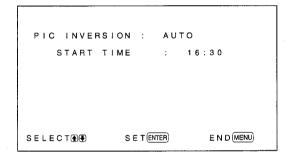
Select the PIC INVERSION mode.
OFF: to set the PIC INVERSION to OFF
ON: to set the PIC INVERSION to ON
AUTO: Carry out the PIC INVERSION process once a day.

When you select AUTO, the following menu appears.



- (1) Press ENT.

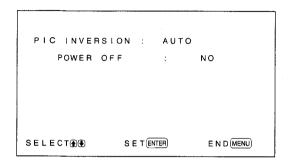
  The cursor (▶) appears on the monitor screen.
- (2) Press ↑/↓ to move the cursor (▶) to "START TIME" and press ENT. The following menu appears and the background of the hour is displayed in cyan.



- (3) Set the hour when the image is to be reversed with ↑/↓ and press ENT.
  The hour is defined and the background of the minute is displayed in cyan.
- (4) Set the minute with **↑**/**↓** and press MENU. The minute is defined and the menu returns to the PIC INVERSION menu.
- (5) Similarly, set the time when the PIC INVERSION function is to be cancelled. The display will be reversed at the START TIME and will return to the original display at the END TIME. This cycle is carried out automatically once a day.

## To set the change to the standby mode at the END TIME

1 After selecting AUTO for PIC INVERSION mode, select POWER OFF and press ENT. The following menu appears on the monitor screen.



2 Select YES with ↑/↓ and press MENU. The monitor changes to standby mode at the designated END TIME.

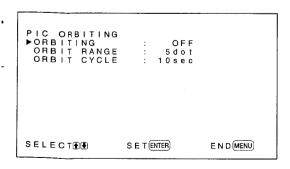
#### Notes

- The power off function, power saving function and on/off timer function in the POWER CONTROL menu cannot be used simultaneously. When one of those functions is set to YES, "---" appears next to the others and their functions are not available.
- If you set START TIME and END TIME to the same time, the setting of START TIME takes priority over that of END TIME. The display does not return to the original display at the END TIME.

# Changing the Display Position Automatically

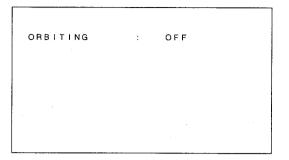
1 In the SCREEN SAVER menu, press ↑/♣ to move the cursor (▶) to "PIC ORBITING" and press ENT.

The following menu appears on the monitor screen.



Press ↑/↓ to move the cursor (►) to "ORBITING" and press ENT.

The following menu appears on the monitor screen.

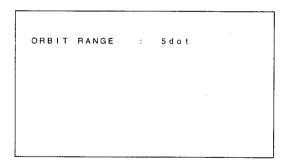


- 3 Select the ORBITING mode with ↑/↓.

  OFF: Cancel the PIC ORBITING function.

  ON: Set the PIC ORBITING function.
- 4 Press MENU.
  The menu returns to the PIC ORBITING menu.
- 5 Select ORBIT RANGE (moving distance) or ORBIT CYCLE (time) with ↑/↓ and press ENT. The following values can be selected:
  ORBIT RANGE: 5dot, 10dot, 15dot, 20dot
  ORBIT CYCLE: 10sec, 30sec, 1min, 5min

The following menu appears on the monitor screen. (The illustration below is for selecting ORBIT RANGE.)



6 Adjust the ORBIT RANGE or ORBIT CYCLE with ↑/↓ and press MENU.

## When both PIC INVERSION and PIC ORBITING are set to ON

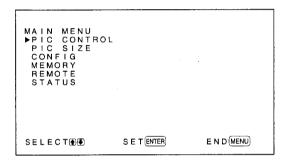
If the PIC ORBITING function is actuated while the picture is reversed, the reversed picture is displayed changing position.

### Controlling Power On/Off Automatically (Power Control Function)

This monitor has two power controlling functions. You can set it to turn off the power automatically after a certain period if there is no input signal from the RGB1 or RGB2 connectors (POWER SAVING function). You can set the time when the power automatically turns on/off (ON/OFF TIMER function).

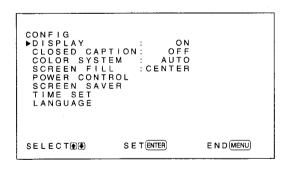
#### **Power Saving Function**

Press MENU.
The main menu appears on the monitor screen.



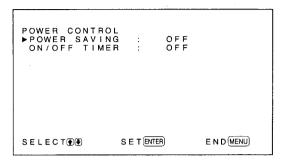
2 Press **↑**/**↓** to move the cursor (**▶**) to "CONFIG" and press ENT.

The CONFIG menu appears on the monitor screen.



3 Press ★/↓ to move the cursor (►) to "POWER CONTROL" and press ENT.

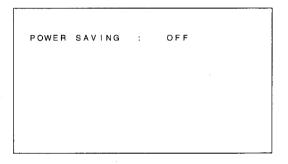
The following menu appears on the monitor screen.



4 Press ↑/↓ to move the cursor (▶) to "POWER SAVING" and press ENT.

The following menu appears on the monitor

The following menu appears on the monitor screen.



5 Press ↑/↓ to select the length of the time until the change to power saving mode.

**OFF:** The power saving function does not work.

**5min:** Change to the power saving mode after five minutes if there is no input signal.

**10min:** Change to the power saving mode after 10 minutes if there is no input signal.

The power indicator flashes when the unit is in the power saving mode.

#### To cancel the power saving function

- Input the sync signal again.
- Press the (1) switch on the control panel or the POWER switch on the Remote Commander.

#### Signal specification for using the power saving function

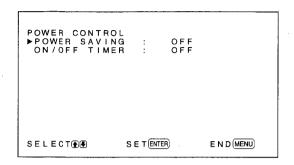
**RGB1:** When the sync signal is connected to the HD/COMP IN connector.

**RGB2:** When the sync signal is connected to the 13th pin of the RGB IN (D-sub 15-pin) connector.

#### **On/Off Timer Function**

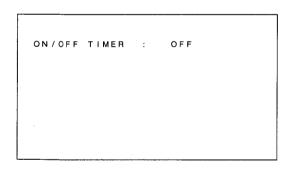
1 In the CONFIG menu, Press ↑/↓ to move the cursor (▶) to "POWER CONTROL" and press ENT.

The following menu appears on the monitor screen.

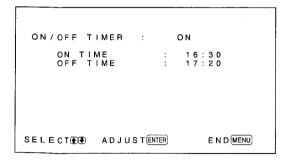


2 Press ★/♣ to move the cursor (▶) to "ON/OFF TIMER" and press ENT.

The following menu appears on the monitor screen.



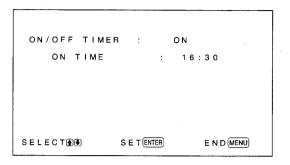
3 Select ON with ↑/↓ and press ENT. The following menu appears on the monitor screen.



4 Press ENT.
The cursor (►) appears on the monitor screen.

5 Press ↑/↓ to move the cursor (►) to "ON TIME" and press ENT.

The following menu appears and the background of the hour is displayed in cyan.



- 6 Set the hour with ↑/↓ and press ENT.

  The hour is defined and the background of the minute is displayed in cyan.
- 7 Set the minute with ↑/↓ and press MENU.
  The minute is defined and the menu returns to the ON/OFF TIMER menu.
- **8** Similarly, set the OFF TIME.

#### Notes

- The power saving function does not work when the signal is input from the LINE connectors.
- If the sync signal is not connected to the HD/COMP IN connector, the monitor does not turn on even if the sync signal is input. Be sure to set POWER SAVING to OFF when only the RGB signal is connected.
- If the sync signal is not connected to the 13th pin of the RGB IN (D-sub 15-pin) connector, the monitor does not turn on even if the sync signal is input. Be sure to set POWER SAVING to OFF when only the RGB signal is connected.
- The power saving function, on/off timer function and power off function in the PIC INVERSION mode cannot be used simultaneously. When one of those functions is set to ON, "---" appears next to the others and their functions are not available.
- If you set ON TIME and OFF TIME to the same time, the setting of ON TIME takes priority over that of OFF TIME. The monitor does not turn off at the OFF TIME.

### **Self-diagnosis Function**

The unit has a self-diagnosis function.

This function displays the monitor's condition with the indicator flashing and numbers on the SERVICE CODE indicator on the left connector panel. The numbers inform you of the monitor's current condition.

When the unit is working properly, only the dot at the lower-right position on the SERVICE CODE indicator flashes

If the (1) indicator flashes, check the number and contact your authorized Sony dealer.

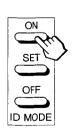
- 1 Check the two-digit number on the SERVICE CODE indicator.
  - The indicator shows one number, or multiple numbers alternately in one second intervals.
- **2** Unplug the unit.
  Inform your authorized Sony dealer of the number.

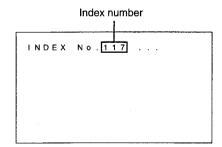
# **Operating a Specific Monitor With the Remote Commander**

Using the supplied Remote Commander, you can operate a specific monitor without affecting other monitors that are installed at the same time.

Press ID MODE ON on the Remote Commander. Monitor index numbers appear in white characters on all the monitors. (Every monitor is allocated an individual preset index number from 1 to 255.)

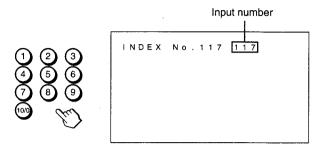
See "To change the index number" in the left-hand column on the next page to change the index number.





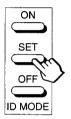
2 Input the index number of the monitor you want to operate using the 0 – 9 buttons on the Remote Commander.

The input number appears right next to the index number of each monitor.



**3** Press ID MODE SET.

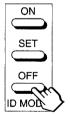
The character on the selected monitor changes to cyan while others change to red.



You can operate only the monitor specified. (All operations are available in ID mode except POWER ON/OFF.)

**4** After the necessary adjustment, press ID MODE OFF.

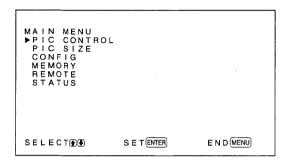
The monitor returns to the normal mode.



#### To change the index number

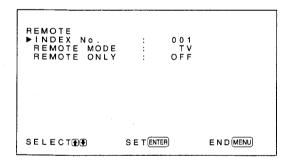
You can change the index number if necessary. When you change the number, use the buttons on the monitor.

**1** Press MENU. The main menu appears on the monitor screen.



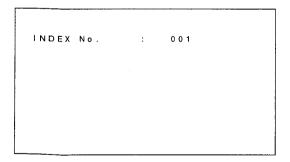
Press **↑**/**↓** to move the cursor (**▶**) to "REMOTE" and press ENT.

The REMOTE menu appears on the monitor screen.



**3** Press **↑**/**↓** to move the cursor (**▶**) to "INDEX No." and press ENT.

The following menu appears on the monitor screen.



4 Select the index number with **↑**/**↓** and press ENT. The menu returns to the REMOTE menu.

# **Using Other Remote Commander Models**

The following operations can be carried out.

- Power on/off
- Input selection
- Menu operations
- Picture adjustments: contrast, phase and chroma
- On-screen display on/off

The operations available and the buttons to be used for each operation are limited depending on each Remote Commander. See the table below.

Remote Commander model		RM-854	RM-1271	RM-PJ1292	RM-PJ1000
REMOTE MODE se	etting	TV.	PJ	PJ	PJ
Input selection	RGB1	RGB	Α , , , , , , , , , , , , , , , , , , ,	A	Α
	RGB2	_	В	В	В
	LINE	LINE1	VIDEO	VIDEO	VIDEO
Menu operation	MENU	MENU	PAGE or ←	PAGE or ←	MENU or ←
	ENTER	ENTER	<b>→</b>	→	ENTER or →
	+	+	1	<b>↑</b>	<b>†</b>
	-	_	+	+	<b>+</b>
Picture adjustment	Contrast	CONTRAST+/~	CONTR+/-	CONTR+/-	CONTR+/-
	Chroma	CHROMA+/-	COLOR+/-	COLOR+/-	COLOR+/-
	Phase	PHASE+/	HUE+/	HUE+/-	HUE+/-
On-screen informat	ion	DISPLAY	_	STATUS ON	STATUS ON

### **Specifications**

#### Video processing

Preset signal Input: formats (See page

22 (GB).)

Sampling rate 13.5 to 140 MHz

Panel system AC-type Plasma Display Panel
Display resolution 510A2W: 1 024 dots × 1 024 lines

 $500A3W: 852 dots \times 480 lines$ 

Pixel pitch  $510A2W: 0.90 \text{ (horizontal)} \times 0.51$ 

(vertical) mm ( $\frac{1}{16} \times \frac{1}{32}$  inches) 500A3W: 1.08 (horizontal) × 1.08 (vertical) mm ( $\frac{1}{16} \times \frac{1}{16}$  inches)

Picture size 510A2W: 921 (horizontal) × 522

(vertical) mm (36  $\frac{3}{8} \times 20 \frac{5}{8}$ 

inches)

500A3W: 920 (horizontal)  $\times$  518 (vertical) mm (36  $\frac{1}{4} \times$  20  $\frac{1}{2}$ 

inches)

Panel size 510A2W: 42-inch (diagonal 1 058

mm)

500A3W: 42-inch (diagonal 1 056

mm)

#### Inputs and Outputs

#### RGB<sub>1</sub>

R (R-Y)/G (Y)/B (B-Y) IN

BNC-type ( $\times$ 3)

0.714 Vp-p/non-composite 75-ohm

(automatic termination)
1 Vp-p/composite 75-ohm
(automatic termination)

SYNC IN (HD/COMP, VD)

BNC-type ( $\times$ 2)

H (or composite) SYNC, V SYNC,

1 to 5 Vp-p high impedance

AUDIO IN (L, R) Phono jack (×2)

500 mVrms, high impedance

R (R-Y)/G (Y)/B (B-Y) OUT

BNC-type (×3) Loop-through

SYNC OUT (HD/COMP, VD)

BNC-type (×2) Loop-through H (or composite) SYNC,

V SYNC

AUDIO OUT (L, R)

Phono jack (×2) Loop-through

#### RGB2

RGB IN D-sub 15-pin (See "Pin

assignment" on page 40 (GB).)

AUDIO IN (L, R) Phono jack (×2)

500 mVrms, high impedance

#### LINE (NTSC, PAL, SECAM, NTSC4.43, PAL60)

VIDEO IN BNC-type  $(\times 1)$ 

Composite video, 1 Vp-p ±2 dB

sync negative, 75-ohm (automatic termination)

Y/C IN Mini DIN 4-pin type (×1)

Y (luminance): 1 Vp-p ±2 dB sync negative, 75-ohm (automatic

termination)

C (chrominance): Burst 0.286 Vp-p ±2 dB (NTSC), 75-ohm (automatic termination) Burst 0.3 Vp-p ±2 dB (PAL),

75-ohm (automatic termination)

AUDIO IN (L, R) Phono jack  $(\times 2)$ 

500 mVrms, high impedance

VIDEO OUT Y/C OUT BNC-type (×1) Loop-through Mini DIN 4-pin type (×1) Loop-

through

AUDIO OUT (L, R)

Phono jack (×2) Loop-through

#### MONITOR OUT AUDIO (L, R)

Phono jack ( $\times$ 2)

Maximum 500 mVrms (Variable

output), high impedance

CONTROL S (IN, OUT)

Mini jack (stereo) (×2)

5 Vp-p

REMOTE (RS-232C)

Mini DIN 8-pin type ( $\times$ 1)

SPEAKERS 6 to 16 ohms, 7 W + 7 W (when

the impedance is 8 ohms)

#### General

Power requirements

510A2W: 100 to 120 V AC, 50/60 Hz, 4.7 A/410 W 220 to 240 V AC, 50/60 Hz,

2.2 A/400 W

500A3W: 100 to 120 V AC, 50/60 Hz, 3.9 A/380 W 220 to 240 V AC, 50/60 Hz, 2.0 A/360 W

Operating conditions

Temperature: 0 °C to 35 °C (32 °F to 95 °F)

Humidity: 20% to 90% (no condensation)

Atmospheric pressure: 700 to

1 060 hPa

Storing/transporting conditions

Temperature: -10 °C to +40 °C

(14 °F to 104 °F) Humidity: 20% to 90% (no condensation)

Atmospheric pressure: 700 to

1 060 hPa

Dimensions

 $1.036 \times 636 \times 152 \text{ mm}$ 

 $(40 \% \times 25 \% \times 6 \text{ inches}) (w/h/d)$ 

Mass

45 kg (99 lb 3 oz)

Supplied accessories

AC power cord (1) AC plug holder (1)

Remote Commander RM-921 (1)

Size AA (R6) batteries (2)

Ferrite core (2)

Foot support bracket (2)

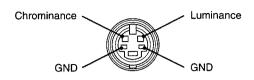
Screws for foot support bracket (6)

Monitor stabilizer (2) Operating instructions (1)

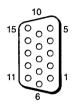
Design and specifications are subject to change without notice.

#### Pin assignment

#### Y/C jack (Mini DIN 4-pin)



#### **RGB IN connector (D-sub 15-pin)**



Pin No.	Signal ******
1	Red video or R-Y
2	Green video or Y
3	Blue video or B-Y
4	Ground
5	Ground
6	Red ground
7	Green ground
8	Blue ground
9	Not used
10	Ground
11	Ground
12	SDA
13	H sync or composite sync
14	V sync
15	SCL